

## **DEFINITIONS**

**Prediabetic** refers to a condition where a person's blood sugar levels are higher than normal, but not high enough to be diagnosed as type 2 diabetes. It is a warning sign that a person is at risk of developing diabetes in the future. It's important to make healthy lifestyle changes to prevent it from progressing to type 2 diabetes<sup>2</sup>.

**Type 1 diabetes** is a chronic condition where the body's immune system mistakenly attacks and destroys the insulin-producing cells in the pancreas. Insulin is a hormone that helps regulate blood sugar levels. People with type 1 diabetes need to take insulin injections or use an insulin pump to manage their blood sugar levels. This type of diabetes usually develops in childhood or adolescence and requires lifelong management. When someone has this, it means their body doesn't make insulin. Insulin is like a key that helps sugar go into our cells to give us energy. When someone has type 1 diabetes, it means their body doesn't make a hormone called insulin. Insulin helps our bodies use the sugar in our food as energy. A person with this condition, the pancreas produces little or no insulin, a hormone that helps regulate blood sugar levels<sup>19</sup>.

**Type 2 diabetes** is a chronic condition where the body either does not produce enough insulin or does not effectively use the insulin it produces. This leads to high blood sugar levels. Type 2 diabetes is often associated with lifestyle factors such as obesity, physical inactivity, and poor diet. The blood sugar levels can be managed through lifestyle changes, such as eating a healthier diet, exercise, being physically active, and, in some cases, taking medication or insulin. This is when your body doesn't use insulin properly or very well. It's like the lock on the cell door is a bit rusty, so sugar has a hard time getting inside. It's like our bodies forget how to use the insulin they make. In this condition, the body has trouble using insulin effectively or doesn't produce enough insulin. Insulin helps regulate blood sugar levels.

**Glycemic load** is a number that estimates of how fast and high a person's blood sugar level is raised by a particular food after being eating. (How fast and how much a certain food can raise your blood sugar). It takes into account both the quantity of carbohydrates in a food and how quickly those carbohydrates are digested and absorbed. Foods with a high glycemic load can cause a rapid increase in blood sugar levels, while foods with a low glycemic load cause a slower and more gradual increase. Managing glycemic load can help regulate blood sugar levels and is important for people with diabetes. Some foods make your sugar go up quickly, and some don't.. It takes into account both the quality and quantity of carbohydrates in the food<sup>8</sup>. Foods with a high glycemic load can cause a rapid increase in blood sugar levels, while foods with a low glycemic load have a slower effect<sup>8</sup>.

**Glycemic index** is a measure of how quickly a particular food raises blood sugar levels compared to a reference food, usually glucose or white bread. Foods with a high glycemic index cause a rapid increase in blood sugar levels, while foods with a low glycemic index cause a slower and more gradual increase. It is important for people with diabetes to be aware of the glycemic index of foods they consume to help manage their blood sugar levels. This is like a list that tells you how fast different foods make your blood sugar go up. Foods with a high glycemic index make it go up faster than foods with a low glycemic index. Similar to glycemic load, the glycemic index also measures how quickly certain foods can raise our blood sugar levels. It helps us understand which foods are better for keeping our blood sugar steady. It's a scale that ranks foods based on how much they increase blood sugar levels compared to pure glucose (sugar)<sup>11</sup>. Foods are classified as low, medium, or high glycemic foods and ranked on a scale of 0 to 100<sup>12</sup>. Foods with a low glycemic index have a slower effect on blood sugar levels, while those with a high glycemic index can cause a rapid increase.

**Carbohydrate management** refers to the process of monitoring and controlling the intake of carbohydrates in the diet to help regulate blood sugar levels. Carbohydrates are a source of energy for the body which can significantly impact blood sugar levels and managing their consumption is crucial for people with conditions like diabetes. and . Maintaining stable blood sugar levels can involve counting carbohydrates, portion control, and making informed food choices. Carbohydrate management involves choosing healthy foods and balancing different types of carbohydrates to keep our blood sugar levels in a good range. It refers to the process of monitoring and controlling the intake of carbohydrates in one's diet.

**Low carbohydrate diet:** A low carbohydrate diet is a way of eating that restricts the intake of carbohydrates, particularly those that are high in sugar and starch and the focus is on consuming foods that are high in protein and healthy fats. By reducing carbohydrate intake, the body is encouraged to use stored fat for energy, which can lead to weight loss. A low carbohydrate diet can be beneficial for some people with diabetes as it can help regulate blood sugar levels and improve insulin sensitivity. It's like you're choosing to eat foods that won't make your blood sugar go up a lot. A low carbohydrate diet means eating foods that have fewer carbohydrates. Carbohydrates are things like bread, pasta, and sweets. So, a low carbohydrate diet would include more foods like vegetables, proteins (like meat or fish), and healthy fats (like avocado or nuts). It's a dietary approach that involves reducing the intake of carbohydrates, especially those from sources like bread, pasta, and sugary foods<sup>12</sup>. The goal is to limit the amount of glucose entering the bloodstream and help regulate blood sugar levels<sup>12</sup>.